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**Waste Management Plan for
Test Area North Final
Groundwater Remediation
Operable Unit 1-07B**

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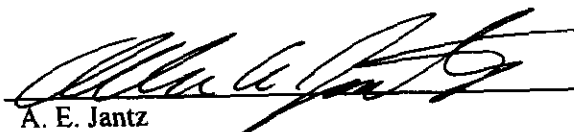
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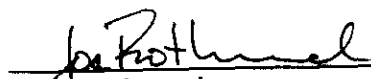
**Waste Management Plan for
Test Area North
Final Groundwater Remediation
Operable Unit 1-07B**

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10-1-98
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ABSTRACT

This waste management plan identifies the waste types and quantities expected to be generated during the implementation of remedial action as addressed in the Record of Decision for Operable Unit 1-07B. Operable Unit 1-07B is located at Test Area North on the Idaho National Engineering and Environmental Laboratory. This plan addressed the various waste streams sources and classification, and gives guidance for their disposition. It also addresses the actions necessary to characterize and classify a new waste stream not previously identified. Each type of waste will be managed in accordance with Lockheed Martin Idaho Technologies Company procedures, as well as state and federal regulations.

CONTENTS

ABSTRACT	iii
ACRONYMS	vii
1. PURPOSE AND OBJECTIVES	1-1
2. WASTE STREAMS.....	2-1
2.1 Identification	2-1
2.2 Characterization	2-1
2.3 New Waste Stream.....	2-7
2.4 Predicted Waste Quantities	2-7
3. WASTE MANAGEMENT	3-1
3.1 Waste Minimization and Segregation	3-1
3.2 Liquid Wastes	3-1
3.3 Laboratory and Sample Waste	3-2
3.4 Packaging and Labeling	3-2
3.5 Storage and Inspection	3-4
3.6 Waste Management and Disposition.....	3-4
3.7 Records Keeping and Reporting	3-5
4. REFERENCES.....	4-1

TABLES

2-1. Operable Unit 1-07B remedial action and waste streams.....	2-2
2-2. Waste stream descriptions.....	2-6
2-3. Estimated waste quantities.....	2-8

ACRONYMS

AOC	area of contamination
ARAR	applicable or relevant and appropriate requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWSA	CERCLA waste storage area
CWSU	CERCLA waste storage unit
DCE	dichloroethene
DOE-ID	U.S. Department of Energy Idaho Operations Office
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ER	environmental restoration
ESD	explanation of significant differences
GWTF	Groundwater Treatment Facility
INEEL	Idaho National Engineering and Environmental Laboratory
IWTS	interim waste tracking system
LDR	land disposal restriction
LMITCO	Lockheed Martin Idaho Technologies Company
MCP	management control procedure
MWSF	Mixed Waste Storage Facility
MWTF	Mixed Waste Treatment Facility
OU	operable unit
PCB	polychlorinated biphenyl
PCE	tetrachloroethene

PPE	personal protective equipment
RAWP	remedial action work plan
RCRA	Resource Conservation and Recovery Act
RMA	radioactive materials area
RRWAC	Reusable Property, Recyclable Materials, and Waste Acceptance Criteria
RWMC	Radioactive Waste Management Complex
SMO	Sample Management Office
SOP	standard operating procedure
SOW	statement of work
TAN	Test Area North
TCE	trichloroethene
TSDF	treatment, storage, and disposal facility
WGI	waste generator interface
WMP	waste management plan
WMPPP	waste minimization and pollution prevention plan
WROC	Waste Reduction Operations Complex

Waste Management Plan for Test Area North Final Groundwater Remediation Operable Unit 1-07B

1. PURPOSE AND OBJECTIVES

The main purpose of this waste management plan (WMP) is to clarify and augment the existing program documents that address the management of waste generated during the remediation of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Operable Unit (OU) 1-07B. The scope of this plan is industrial, listed hazardous, low-level radioactive, and mixed waste generated as a result of the remedial activities associated with OU 1-07B. This plan is supportive of, and subordinate to, the *Waste Certification Plan for the Environmental Restoration Program* (Lockheed Martin Idaho Technologies Company [LMITCO] 1996) and Management Control Procedure (MCP)-444, "Characterization Requirements for Solid and Hazardous Waste." This plan provides a "road map" to the requirements for managing wastes generated while remediating OU 1-07B. Specific WMPs will be developed to support activities that are subordinate to and comply with the requirements of this plan. These specific WMPs will identify the wastes generated, relate these wastes to the waste streams in this plan, identify any new waste streams, and describe the management of these new waste streams using the methodology in Section 2 of this plan.

The following management issues addressed in this plan include:

- Methodologies for identifying and characterizing wastes generated during the remedial action
- Handling sample waste
- Segregating wastes
- Packaging various waste types
- Labeling and inspecting waste types
- Storage areas
- Record keeping and reporting requirements
- Transporting and disposing requirements.

Waste is currently stored at OU 1-07B using two CERCLA waste storage units (CWSU) within the CERCLA waste storage area (CWSA), which is a fenced area within the area of contamination (AOC). The explanation of significant differences (ESD) (LMITCO 1997) defines the AOC as "... the area overlying and within the contaminated groundwater plume (i.e., detectable trichloroethene [TCE] concentrations greater than 5 µg/L)." Waste is held in CWSA pending disposition and/or transfer to one of the following waste management areas: at the Idaho National Engineering and Environmental Laboratory (INEEL), Waste Reduction Operations Complex (WROC), Radioactive Waste Management

Complex (RWMC), Mixed Waste Treatment Facility (MWTF); or to an offsite facility. Since this is a CERCLA action, the storage meets the substantive requirements of Resource Conservation and Recovery Act (RCRA) for temporary storage, except that the 90-day limit for storage is not applicable. The history behind managing these waste streams as RCRA-listed wastes is in the Remedial Action Work Plan (RAWP) (U.S. Department of Energy Idaho Operations Office [DOE-ID] 1998) Section 7.

Information related to the polychlorinated biphenyls (PCB) waste management is also contained in Section 7 of the RAWP. As addressed in the RAWP, PCB concentrations found to date are below regulatory concern and will be managed "as found." Therefore, management of PCBs is not addressed in this plan. If PCBs are found in concentrations above regulatory concern (50 mg/kg), this WMP will be revised.

Although this document is issued as a stand-alone document, it is intended to be used in conjunction with the *Remedial Action Work Plan Test Area North Final Groundwater Remediation-Phase B Operable Unit 1-07B* (DOE-ID 1998).

2. WASTE STREAMS

2.1 Identification

Waste streams from the various activities associated with remediation of OU 1-07B are identified in Table 2-1. Waste streams shown as low-level mixed waste that do not contain radionuclides above detection limits are classified as F001. Table 2-2 gives a description of these waste streams. Waste Streams 1 through 4 addressed sludges and residues in the bottoms of tanks and the air stripper. These waste streams have never been generated and therefore, are not used. The generated waste streams are profiled and tracked in the interim waste tracking system (IWTS). These IWTS tracking numbers consist of a four-digit number followed by a letter suffix. The suffix indicates the current revision of the profile. The *INEEL Reusable Property, Recyclable Materials, and Waste Acceptance Criteria* (DOE-ID 1997), hereinafter referred to as the RRWAC, requires that the waste profile be reviewed annually.

Waste streams are also identified as part of the *U.S. Department of Energy Idaho Operations Office Idaho National Engineering Laboratory Waste Minimization and Pollution Prevention Awareness Plan* (DOE-ID 1994), hereinafter referred to as the WMPPP, at the INEEL. These identifications for OU 1-07B consist of a 14 character alpha-numeric number that indicates the facility of origin, Test Area North (TAN), the OU (OU107B), and a six digit sequential number.

Table 2-1 shows the correlation between the OU 1-07B waste stream identification, the IWTS profile number, and the WMPPP identification. Table 2-1 also associates the various OU 1-07B remedial activities with the solid waste categories. Nonhazardous, nonradioactive waste streams do not carry a unique identification number. The *Annual Site Treatment Plan Report* (DOE-ID 1996) is used for OU 1-07B incinerable low-level mixed waste. As the remedial action continues, additional waste streams may be identified. These waste streams will be addressed in the specific work plans, unless they will be continuing beyond the specific work plan scope, in which case a revision to this plan will result. Section 2.3 addresses the methodology to be followed when a new waste stream is identified.

2.2 Characterization

All wastes generated are characterized using both chemical and physical analysis of representative samples of the waste streams, as required by 40 Code of Federal Regulations (CFR) 264.13. Based on this characterization, hazardous waste determinations are performed that assign the appropriate U.S. Environmental Protection Agency (EPA) Waste Codes (40 CFR 262.11). After the hazardous waste determinations are completed, the IWTS profile number is assigned and the appropriate information entered into the tracking system. Guidance for completion of the hazardous waste determination, including the appropriate forms to be completed, is given in MCP-44, "Characterization Requirements for Solid and Hazardous Waste." Completed hazardous waste determinations will be maintained for all waste streams as part of the profile package. The existing Groundwater Treatment Facility (GWTF) waste streams, sent to INEEL waste management, have hazardous waste determinations completed as part of the appropriate profile package that is tracked by the IWTS number.

A hazardous waste determination uses two approaches to determine if the waste is characteristic waste: (1) process knowledge, including standard protocols for sampling and laboratory analysis that are not specialized RCRA methods and other equivalent regulatory approved methods, and (2) specialized

Table 2-1. Operable Unit 1-07B remedial action and waste streams.

OU 1-07B Waste Stream	IWTS Identification	OU 1-07B Identification	Pollution Prevention Identification	Non- Hazardous	Non- Radioactive	Low-Level Mixed Waste ^a	RCRA Listed	RCRA Characteristic ^b
Groundwater Treatment Facility Operations								
Office Waste				XXX	XXX			
Industrial Waste				XXX	XXX			
Spent Activated Carbon	1936	1-07B-005	TANOU107B00003				XXX	
Filter Sand		1-07B-006				XXX		
Spent Ion Exchange Resin	1938	1-07B-007	TANOU107B00001			XXX		
Bag Filters/Sludge	1935	1-07B-008	TANOU107B00002			XXX		
Personnel Protective Equipment	1935	1-07B-009				XXX		
Laboratory/Sample Residue	2331 ^c	1-07B-010				XXX		D002 ^d
Bag Filter Rings		1-07B-011				XXX		
Miscellaneous Scrap Metal From System Modifications		1-07B-012				XXX		
Equipment Decontamination Liquid Residue		1-07B-013				XXX		
Equipment Decontamination Solids Residue		1-07B-014				XXX		

Table 2-1. (continued).

OU 1-07B Waste Stream	IWTS Identification	OU 1-07B Identification	Pollution Prevention Identification	Non- Hazardous	Non- Radioactive	Low-Level Mixed Waste ^a	RCRA Listed	RCRA Characteristic ^b
Well Drilling and Site Characterization								
Drill Cuttings Above the Saturated Zone				XXX	XXX			
Drill Cuttings Below Saturated Zone		1-07B-015				XXX		
Equipment Decontamination Liquid Residue		1-07B-013				XXX		
Equipment Decontamination Solids Residue		1-07B-014				XXX		
Personnel Protective Equipment	1935	1-07B-009				XXX		
Laboratory/Sample Residue	2331 ^c	1-07B-010				XXX		D002 ^d
Surge and Stress Evaluation								
Sediment, Sand, and Sludge	1935	1-07B-008	TANOU107B000002			XXX		
Equipment Decontamination Liquid Residue		1-07B-013				XXX		
Equipment Decontamination Solids Residue		1-07B-014				XXX		
Personnel Protective Equipment	1935	1-07B-009				XXX		

Table 2-1. (continued).

OU 1-07B Waste Stream	IWTS Identification	OU 1-07B Identification	Pollution Prevention Identification	Non- Hazardous	Non- Radioactive	Low-Level Mixed Waste ^a	RCRA Listed	RCRA Characteristic ^b
Laboratory/Sample Residue	2331 ^c	1-07B-010				XXX		D002 ^d
In Situ Bioremediation								
Equipment Decontamination Liquid Residue		1-07B-013				XXX		
Equipment Decontamination Solids Residue		1-07B-014				XXX		
Personnel Protective Equipment	1935	1-07B-009				XXX		
Laboratory/Sample Residue	2331 ^c	1-07B-010				XXX		D002 ^d
In Situ Chemical Oxidation								
Equipment Decontamination Liquid Residue		1-07B-013				XXX		
Equipment Decontamination Solids Residue		1-07B-014				XXX		
Personnel Protective Equipment	1935	1-07B-009				XXX		
Laboratory/Sample Residue	2331 ^c	1-07B-010				XXX		D002 ^d
Natural Attenuation								
Personnel Protective Equipment	1935	1-07B-009				XXX		

Table 2-1. (continued).

OU 1-07B Waste Stream	IWTS Identification	OU 1-07B Identification	Pollution Prevention Identification	Non- Hazardous	Non- Radioactive	Low-Level Mixed Waste ^a	RCRA Listed	RCRA Characteristic ^b
Laboratory/Sample Residue	2331 ^c	1-07B-010				XXX		D002 ^d

a. Low-level mixed waste will be RCRA-listed F001 if it does not contain radionuclides above detection limits.

b. RCRA characteristic wastes per 40 CFR 261.24.

c. Aqueous samples preserved in nitric acid residue.

d. If the pH <2.0, then wastes are characteristic D002 waste.

Table 2-2. Waste stream descriptions.

Waste Stream Number	Waste Stream Description
1-07B-001	Solids were expected to be introduced into the surge tank during regular operations. Current data indicates that these solids have not accumulated to the extent originally envisioned. These solids are sludge and are included with Waste Stream 1-07B-006.
1-07B-002	Very minor residue that was expected in the verification tank as part of regular operations. Current data indicates that these solids have not accumulated to the extent originally envisioned. These solids are sludge and are included with Waste Stream 1-07B-006.
1-07B-003	Solids removed from the backwash tank cleaning and general maintenance operation. Current data indicates that these solids have not accumulated to the extent originally envisioned. These solids are sludge and are included with Waste Stream 1-07B-006.
1-07B-004	Solids accumulated in the sump of the air stripper during regular operations. Current data indicates that these solids have not accumulated to the extent originally envisioned. These solids are sludge and are included with Waste Stream 1-07B-006.
1-07B-005	Any activated carbon that becomes contaminated with TCE, tetrachloroethene (PCE), dichloroethene (DCE), and other volatile organic contaminants. Each adsorber bed contains approximately 680 kg (1,500 lb) of activated carbon. Spent carbon is stored in drums inside the CWSA until transferred to another waste management facility. The spent carbon is RCRA-listed F001 waste.
1-07B-006	The multi-media filter is backwashed periodically to remove contaminants. The material removed is collected in the bag filter. The multi-media filter materials becomes contaminated with low-level mixed waste due to usage. The waste will be dewatered, drummed, and stored at the CWSA pending final disposition.
1-07B-007	Ion-exchange media (resin) is used to remove radionuclides from the groundwater. The media will require changing when ion exchange becomes ineffective. This material will be low-level mixed. The media will be dewatered, drummed, and stored at the CWSA pending final disposition.
1-07B-008	Bag filters collect fines and sludge from system operations. This material will be low-level mixed. The solids from the filter will be dewatered, drummed, and stored at the CWSA pending final disposition.
1-07B-009	Personal protective equipment (PPE) is generated during maintenance of the process system including changing the activated carbon, changing the ion-exchange media, changing the bag filters, and conducting routine maintenance that requires opening portions of the system.
1-07B-010	Laboratory and sample residues are wastes generated during routine GWTF laboratory operations. These consist of PPE, liquid chemicals, samples, and other waste generated during sampling and analysis activities. Laboratory industrial (sanitary) waste is managed separately and is not included in this waste stream.
1-07B-011	Bag filter rings are steel rings within the bag filters that support the filters while in the filter housing. The steel rings are removed and segregated during bag filter change out.

Table 2-2. (continued).

Waste Stream Number	Waste Stream Description
1-07B-012	Miscellaneous scrap metal from system modifications consist of piping (both carbon and stainless steel) and valves. Numerous piping sections have been replaced throughout the facility and well discharge lines.
1-07B-013	Equipment decontamination liquid residue is that liquid from decontamination processes that has been evaluated as not compatible with GWTF operations.
1-07B-014	Equipment decontamination solids residue is the residue that has been removed from equipment during the decontamination process that is not classified as drill cuttings or otherwise fits any of the above waste stream descriptions.
1-07B-015	Drill cuttings from below the saturated zone are generated during drilling activities below the water table. These cuttings consist of fractured basalt, which is brought to land surface and contained in frac tanks. The high-pressure air from the drill rig forces the cutting from the borehole to the surface where they are captured in the frac tank.

RCRA sampling and analysis for some RCRA regulated materials. Process knowledge influences the amount of sampling and analysis required in order to characterize recyclable materials and waste. The 40 CFR 268 regulation addresses land disposal restrictions (LDRs) for hazardous waste. Additionally, INEEL specific requirements for treatment, storage, and disposal are addressed in the RRWAC.

2.3 New Waste Stream

Any new wastes streams, not identified in Table 2-1, are required to have the waste projected to be generated, identified, and characterized; a hazardous waste determination completed and presented to the anticipated waste management organization (e.g., WROC waste generator interface [WGI]) for approval by that organization prior to generation. The hazardous waste determination becomes part of the profile package for that waste stream upon approval by the waste management organization. Guidance for completion of the hazardous waste determination, including the appropriate forms to be completed, are given in MCP-244. In addition, all identified waste management activities must be in accordance with the requirements of the environmental remediation (ER) waste certification plan.

2.4 Predicted Waste Quantities

Historical records of waste generation during GWTF operations were reviewed, along with projected future operations, to estimate the quantity of each waste stream that may be generated each year for the next 5 years. Table 2-3 presents the estimated quantities of waste that will be generated during the next 5 years by each identified waste stream.

Table 2-3. Estimated waste quantities.

Waste Stream	1998 (m ³)	1999 (m ³)	2000 (m ³)	2001 (m ³)	2002 (m ³)
1-07B-005	3.25	3.25	3.25	3.25	3.25
1-07B-006	0.00	0.80	0.00	0.00	0.00
1-07B-007	6.34	3.25	3.25	3.25	0.00
1-07B-008	1.58	1.00	1.00	1.00	1.00
1-07B-009	4.36	2.58	1.98	1.98	1.98
1-07B-010	1.20	1.00	1.00	0.57	0.57
1-07B-011	0.03	0.03	0.03	0.03	0.03
1-07B-012	3.62	1.81	0.00	0.00	0.00
1-07B-013	0.00	0.00	0.00	0.00	0.00
1-07B-014	0.00	0.00	0.00	0.00	0.00
1-07B-015	566.00	362.25	141.50	0.00	0.00

3. WASTE MANAGEMENT

The *Waste Certification Program for the Environmental Restoration Program* (LMITCO 1996) discusses the overall strategy for management of waste generated as a result of the remediation efforts at the INEEL. The following discussions are intended to clarify these strategies as they apply to OU 1-07B.

Wastes generated during remedial activities will be segregated, containerized, labeled, and stored in accordance with the substantive requirements of RCRA. While sufficient quantities of waste are being accumulated to facilitate treatment and/or disposal, the waste will be characterized (as necessary), manifested (as required), and prepared for disposal.

3.1 Waste Minimization and Segregation

Waste minimization for this project is primarily achieved through design and planning to ensure efficient operations and to ensure that wastes are not generated unnecessarily. To the extent possible, only the contaminated portions of waste material will be discarded as regulated waste (e.g., separating soiled portions of PPE from clean portions).

The WMPPP addresses the efforts to be expended and the reports required to track waste generated at the INEEL. The WMPPP directs that the volume of waste generated during INEEL operations be reduced on an annual basis to achieve the ultimate goal of zero waste generated. The waste certification plan (LMITCO 1996) contains copies of the WMPPP reports for 1996 and 1997. Activities associated with the OU 1-07B remedial action are intended to meet the requirements for waste minimization as addressed in the WMPPP.

Best management practice directs that all waste and PPE generated inside the controlled area for the remedial action will be managed as potentially contaminated low-level mixed waste or as RCRA-listed if they are not radioactively contaminated. Industrial wastes do not require segregation by type. Therefore, containers will be identified as industrial waste and maintained outside the controlled area for separate collection. Contaminated waste will be RCRA-listed or low-level mixed. Both types of contaminated waste will require segregation as either incinerable (e.g., wipes, personal protective equipment [PPE]) or nonincinerable (e.g., drill cuttings), in anticipation of subsequent waste management. Containers for collection of contaminated waste will be clearly labeled to identify waste type and will be maintained inside the controlled area until removed for subsequent management. Waste segregation by type entails separation by source of contamination (e.g., mixed or RCRA-listed), and further separation to designate subsequent management/disposition (e.g., incinerable, compactible, free liquid containing).

3.2 Liquid Wastes

Any waste streams generated during the OU 1-07B remedial actions that contain free liquids will be decanted and the liquid collected. If the liquid is evaluated as compatible with GWTF operation (e.g., do not contain surfactants that will cause foaming in the air stripper), the liquid will be transferred to the GWTF surge tank for processing. If the free liquid is evaluated as not compatible with GWTF operations, it will be stored in containers in the CWSUs pending completion of the hazardous waste determination. These liquids will then be managed in accordance with the hazardous waste determination.

3.3 Laboratory and Sample Waste

The GWTF sample and laboratory waste is managed in accordance with GWTF standard operating procedure (SOP) LAB-001, "Laboratory Waste Disposal." All other laboratory and sample waste is managed in accordance with the statement of work (SOW) issued by the Sample Management Office (SMO) as part of the contract for the subcontracted laboratory and is discussed in greater detail below. Unaltered samples will be segregated from all other wastes to facilitate possible return to the source.

3.4 Packaging and Labeling

Containers used to store and transport hazardous waste must meet the requirements of 40 CFR 264, Subpart I. The RRWAC contains additional details concerning packaging and container conditions. Appropriate containers for RCRA-listed waste include 208-L (55-gal) drums and other suitable containers that meet the U.S. Department of Transportation (DOT) regulations on packaging (49 CFR 171, 173, 178, and 179) or RRWAC Sections 4.4, 4.5, and 4.6. Wooden boxes 1.2 × 1.2 × 2.4 m (4 × 4 × 8 ft) and 0.6 × 1.2 × 2.4 m (2 × 4 × 8 ft) may be used for sizable waste (e.g., piping, valves, drill cuttings, hoses). The WGI will be consulted to ensure the packaging is acceptable to the receiving facility.

Waste containers will be labeled with standard green and yellow hazardous waste labels. The following information will be included on the labels:

- Unique bar code number
- Name of generating facility (e.g., OU 1-07B)
- Phone number of generator contact
- Listed or characteristic waste code(s)
- Waste package gross weight
- Maximum radiation level on contact and at 1 m in air
- Waste stream or material identification number as assigned by the receiving organization
- Other labels and markings as required by 49 CFR 172, Subparts D and E.

Any of the above information that is not known when the waste is labeled, may be added when the information is known (e.g., gross weight).

The unique bar code serial number is used for tracking and consists of five-digit number followed by a single alpha designator. The alpha designator indicates which facility generated the bar code. Presently, only WROC generates the bar codes and their alpha designator is "K." These bar codes will be furnished by WROC in lots of 50 and kept at the GWTF. A new bar code will be affixed to each container when waste is first placed in the container.

NOTE: Present practice at the GWTF for labeling waste consists of 1310-W-XXX, where XXX is a sequential number. For approximately the next year this labeling will be on the existing waste containers while the change over to the new labeling method is implemented. As the old containers are relabeled, a cross-reference list will be generated to track both labeling methods.

Any waste shipped off the INEEL from OU 1-07B must be labeled in accordance with applicable DOT labels and markings (49 CFR 172). Additionally, waste labels must be visible, legibly printed or stenciled, and placed so that a full set of labels and markings are visible. See RRWAC Section 4.4, 4.5, or 4.6 for additional labeling information.

The GWTF SOP-11 addresses labeling and tracking of all waste containers within the CWSA. The required information entered into the database for tracking includes:

- Waste container unique bar code number
- Waste description
- Physical properties
- Container type
- Generation date
- Waste volume
- Measured volume
- Container location
- Waste stream identification number
- Activity/type
- DOT classification
- EPA waste code(s)
- Gross weight of waste container
- Generation source
- Last inspection date
- Generator name
- Manifest number
- Transporter ID

- Date removed
- Notes, as appropriate.

Any of the above information that is not known when the waste is labeled, may be added when the information is known (e.g., Transporter ID).

3.5 Storage and Inspection

Wastes will be stored in the CWSA at TAN. Solid wastes segregated as hazardous and/or mixed and placed in 208-L (55-gal) drums, will be stored in the CWSUs, GWTF U-1 and U-2. Wastes placed in wooden storage boxes ($1.2 \times 1.2 \times 2.4$ m [$4 \times 4 \times 8$ ft] and $0.6 \times 1.2 \times 2.4$ m [$2 \times 4 \times 8$ ft]), or other suitable containers too large for the CWSU, will be stored in the CWSA near the CWSUs. Waste segregated as low-level radioactive will be stored in the CWSA in a radioactive materials area (RMA) near the CWSUs.

To meet the substantive requirements of 40 CFR 264, Subpart I, the RCRA applicable or relevant and appropriate requirements (ARARs) (DOE-ID 1997b), an inspection of the storage area (CWSA) will be conducted as part of the weekly waste container inspection. The purposes of the weekly container inspection are to look for containers that are leaking, that are deteriorating due to corrosion or other factors, to ensure that the containment system has not deteriorated due to corrosion, and to verify labels are in place and legible. Inspections of the containers and the CWSA are conducted to meet the guidance contained in MCP-443. The inspections will be documented on weekly inspection form when completed. The checklists (GWTF SOP-11) used to guide the inspection are maintained in the office at TAN with copies kept at the CWSUs.

3.6 Waste Management and Disposition

At the conclusion of a remedial action, or when deemed necessary, industrial waste will be dispositioned to the INEEL landfill, following the protocols and completing the forms identified by the RRWAC. To achieve the waste management activity, industrial waste will be turned over to TAN operations personnel for management under existing facility waste streams and in accordance with standing facility procedures.

When sufficient quantities of waste has been accumulated to ship to one of the INEEL waste management units or off the INEEL to a commercial waste management facility, a WGI will be contacted and a LMITCO Form 435 completed and submitted for approval, if required. A Form 435 has been completed for the waste streams that have an IWTS profile number (see Table 2-1). As new waste streams are identified, a Form 435 will be completed and approved. Once the Form 435 is approved, the WGI will provide assistance in packaging and transportation of the waste. It is important to note that all waste dispositioned to a permitted treatment, storage, and disposal facility (TSDF) should be labeled as CERCLA, to facilitate eventual management in accordance with the final remedy for the site. Should further characterization of the contaminated waste be necessary (e.g., toxicity characteristic determination), services will be requested from environmental monitoring and the SMO. Requesting these services requires completion of Form L0450-1, "Environmental Special Request Information Log," and Form 435.26, "Sample Management Office Services Request Form."

Management of contaminated wastes, generated at a subcontract laboratory during conductance of analytical testing, will be the responsibility of the subcontract laboratory. However, overall management of the samples must be in accordance with the requirements of MCP-2864, "Sample Management." Specifically, this MCP requires that the facility environmental safety and health manager provide written approval prior to return of any media, and that written documentation of sample disposition be developed and maintained. In addition, the requirements for identification, quantification, characterization, and approval by LMITCO WGI and shipping personnel, prior to waste generation, applies to any waste generated during these operations. To initiate the return of these wastes to the INEEL, the subcontract laboratory will notify LMITCO in the form of a written report identifying the known volume and characteristics of each waste type, including shipment and packaging details. The majority of the information required for this report will be provided by Form 435 completion. LMITCO will assist the subcontractor laboratory in the preparation of these forms. Final authorization for the return of wastes will be provided in writing, from LMITCO to the subcontract laboratory. Laboratory wastes will be sent to the Mixed Waste Storage Facility (MWSF) or to the RWMC Type-II Storage Modules, as applicable. It is important to note that all waste dispositioned to a permitted TSDF be labeled as CERCLA, to facilitate eventual management in accordance with the final remedy for the site. An unaltered sample could be immediately returned to its source. The returned material will be addressed with the source material at the site. All waste management activities undertaken by the subcontract laboratory must be in accordance with this plan, the contracted SOW, and the individual work plan.

Currently, all hazardous and mixed waste generated in the remediation efforts of OU 1-07B, not processed through the GWTF, are sent to the INEEL waste management organization for transportation, storage, and disposal.

3.7 Records Keeping and Reporting

The following records and reports related to this WMP are required to be maintained as indicated by MCP-443, "Temporary Accumulation Areas—Large Quantity Generator." Some of these may be completed by others, but must be available. These records and reports are to be maintained "at the facility" and include:

- Hazardous waste determinations, characterization information, and statements of process knowledge (by others) 3 years
- CWSA facility inspection reports and log-in, log-out history 3 years
- Training records 3 years
- Documentation with respect to all spills: Life of facility
 - Quantity released calculations
 - Release report and follow-up notifications
 - Spill specific hazardous waste determinations and characterizations.

4. REFERENCES

- DOE-ID, 1994, *U.S. Department of Energy Idaho Operations Office Idaho National Engineering Laboratory Waste Minimization and Pollution Prevention Awareness Plan*, U. S. Department of Energy Idaho Operations Office, DOE/ID-10333 (94) Revision 1, May.
- DOE-ID, 1996, *Annual Site Treatment Plan Report*, U. S. Department of Energy Idaho Operations Office, DOE/ID-10559, September.
- DOE-ID, 1997, *INEEL Reusable Property, Recyclable Material, and Waste Acceptance Criteria*, U. S. Department of Energy Idaho Operations Office, DOE/ID-10381, Revision 6, February.
- DOE-ID, 1998, *Remedial Action Work Plan Test Area North Final Groundwater Remediation-Phase B, Operable Unit 1-07B*, U. S. Department of Energy Idaho Operations Office, DOE/ID-10629, Revision 0, August.
- LMITCO, 1996, *Waste Certification Plan for the Environmental Restoration Program*, Lockheed Martin Idaho Technologies Company, INEL-96/0043, April.
- LMITCO, 1997, *Explanation of Significant Differences from the Record of Decision for the Technical Support Facility Injection Well (TSF-05) and Surrounding Groundwater Contamination (TSF-23) and Miscellaneous No Action Sites, Final Remedial Action, Operable Unit 1-07B, Waste Area Group 1, Idaho National Engineering and Environmental Laboratory*, Lockheed Martin Idaho Technologies Company, INEEL/EXT-97-00931, November.